

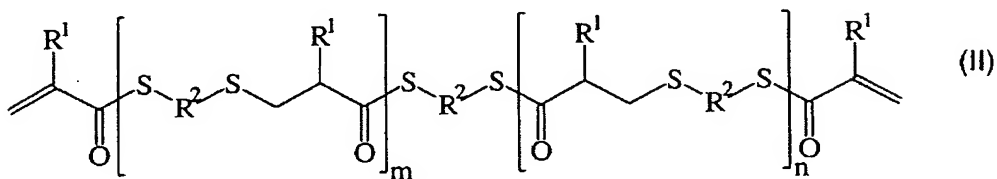
IN THE CLAIMS

Please amend the claims as follows:

Claims 1-33 (Canceled).

Claim 34 (Currently Amended): A composition comprising a mixture of:

A) compounds of the formulas (I) and (II):



wherein

R¹ is independently at each instance hydrogen or a methyl radical,

R² is independently at each instance ~~a linear or branched, aliphatic or cycloaliphatic radical, or a substituted or unsubstituted aromatic or heteroaromatic radical~~ at least one selected from the group consisting of a linear aliphatic radical, a branched aliphatic radical, a cycloaliphatic radical, an aromatic radical and a heteroaromatic radical, and

m and n are each independently an integer of not less than 0, subject to the proviso that $m + n > 0$;

B) at least one ethylenically unsaturated monomer (A) which is different from said compounds of said formulas (I) and (II); and

C) at least one thiourethane compound (T), said compound (T) obtained by:

a) the reaction of one equivalent of at least one diisocyanate of the formula (X):



wherein

R^9 is ~~a linear or branched aliphatic or cycloaliphatic radical, or a substituted or unsubstituted aromatic or heteroaromatic radical~~ at least one selected from the group consisting of a linear aliphatic radical, a branched aliphatic radical, a cycloaliphatic radical, an aromatic radical and a heteroaromatic radical, with

v_D equivalents of a dithiol of the formula (XI):



wherein

v_D is from 0.1 to 0.9,

R^{10} is ~~a linear or branched, aliphatic or cycloaliphatic radical or a substituted or unsubstituted aromatic or heteroaromatic radical~~ at least one selected from the group consisting of a linear aliphatic radical, a branched aliphatic radical, a cycloaliphatic radical, an aromatic radical and a heteroaromatic radical, or

v_D equivalents of a composition comprising at least one dithiol of said formula (XI) and at least one compound of said formula (XII):



wherein

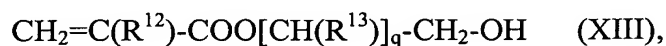
R^{11} is ~~a linear or branched, aliphatic or cycloaliphatic radical or a substituted or unsubstituted aromatic or heteroaromatic radical~~ at least one selected from the group consisting of a linear aliphatic radical, a branched aliphatic radical, a cycloaliphatic radical, an aromatic radical and a heteroaromatic radical,

Z is oxygen or sulphur,

in the presence of a catalytically effective amount of a urethane catalyst; and
b) the reaction, in the presence of reaction-catalyzing and stabilizing compounds, of
at least one α,ω -difunctional thiourethane compound of step a)

with

v_H equivalents of at least one hydroalkyl (meth)acrylate of the formula
(XIII):



wherein

$$v_H = 2 - 2 * v_D,$$

R^{12} is hydrogen or a methyl radical,

R^{13} is hydrogen or a linear or branched alkyl radical having 1 to 4 carbon
atoms, and

Q is a positive integer from 1 to 3.

Claim 35 (Previously Presented): The composition according to Claim 34, wherein
said radical urethane catalyst is at least one compound selected from the group consisting of
pyridine, diazobicyclo(2.2.2)octane, collidine and picoline.

Claim 36 (Previously Presented): The composition according to Claim 34, wherein
said radical R^{13} is hydrogen.

Claim 37 (Previously Presented): The composition according to Claim 34, wherein
said at least one hydroxyalkyl (meth)acrylate of said formula (XIII) is selected from the
group consisting of 2-hydroxyethyl methacrylate, 2-hydroxyethyl acrylate, 4-hydroxybutyl
methacrylate and 4-hydroxybutyl acrylate.

Claim 38 (Previously Presented): The composition according to Claim 34, wherein said radical R^9 is an aliphatic radical having 2 to 9 carbon atoms.

Claim 39 (Previously Presented): The composition according to Claim 34, wherein said radical R^{10} is an aliphatic radical having 1 to 10 carbon atoms.

Claim 40 (Previously Presented): The composition according to Claim 39, wherein said radical R^{10} is a linear aliphatic radical having 2 to 8 carbon atoms.

Claim 41 (Previously Presented): The composition according to Claim 34, further comprising at least one ethylenically unsaturated monomer (B), which is different from the thiourethane compound (T), as a monomer (A).

Claim 42 (Previously Presented): The composition according to Claim 41, wherein said at least one ethylenically unsaturated monomer (B) is a (meth)acrylate of the formula (XIV):

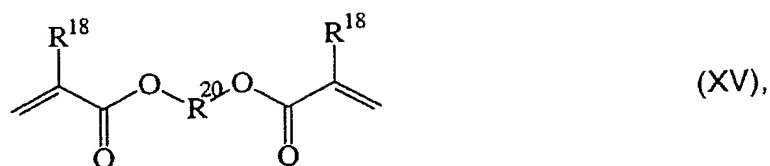


wherein

R^{18} is hydrogen or methyl, and

R^{19} is a linear or branched alkyl or cycloalkyl radical or an aromatic radical having 1 to 40 carbon atoms;

a di(meth)acrylate of the formula (XV):



wherein

R^{18} is independently at each instance hydrogen or methyl, and

R^{20} is a linear or branched, aliphatic or cycloaliphatic radical or a radical of the formula (XVa):



wherein

R^{22} is a linear or branched, aliphatic or cycloaliphatic radical,

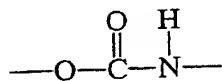
z is an integer between 1 and 1000,

R^{21} is independently at each instance a linear or branched, aliphatic or cycloaliphatic radical, and

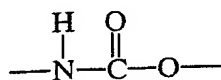
X^1 is independently at each instance hydrogen or sulphur, an ester group of the formula (XVb) or (XVc):



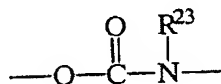
a urethane group of the formula (XVd), (XVe), (XVf) or (XVg):



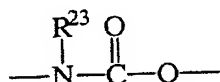
(XVd)



(XVe)

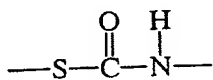


(XVf)

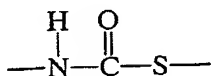


(XVg)

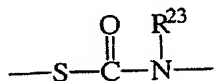
a thiourethane group of the formula (XVh), (XVi), (XVj) or (XVk):



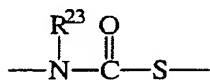
(XVh)



(XVi)

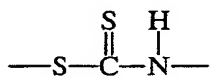


(XVj)

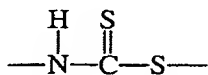


(XVk)

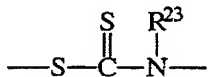
a dithiourethane group of the formula (XVl), (XVm), (XVn) or (XVo):



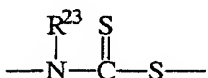
(XVl)



(XVm)

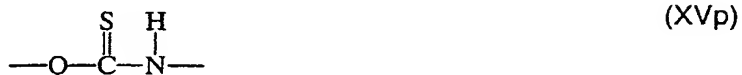


(XVn)



(XVo)

or a thiocarbamate group of the formula (XVp), (XVq), (XVr) or (XVs):



wherein R^{23} is a linear or branched, aliphatic or cycloaliphatic radical,
 and/or styrene.

Claim 43 (Previously Presented): The composition according to Claim 42, wherein
 said monomer (B) is a di(meth)acrylate of said formula (XV).

Claim 44 (Previously Presented): A process for producing a transparent plastic,
 comprising polymerizing the composition according to Claim 34.

Claim 45 (Previously Presented): A highly transparent plastic obtained by the process
 according to Claim 44.

Claim 46 (Previously Presented): A highly transparent plastic according to Claim 45,
 wherein said transparent plastic has a DIN 53491 refractive index is greater than 1.6.

Claim 47 (Previously Presented): A highly transparent plastic according to Claim 45, wherein said transparent plastic has a DIN 53491 Abbe number greater than 36.

Claim 48 (Previously Presented): A highly transparent plastic according to Claim 45, wherein said transparent plastic has an ISO 179/1fU Charpy impact toughness greater than 3.0 kJ/m².

Claim 49 (Previously Presented): A highly transparent plastic according to Claim 45, wherein said transparent plastic has a DIN 5036 transmission greater than 88.5%.

Claim 50 (Previously Presented): A highly transparent plastic according to Claim 45, wherein said transparent plastic has an ISO 306 Vicat temperature greater than 50.0°C.

Claim 51 (Previously Presented): An optical lens comprising the transparent plastic according to Claim 45.

Claim 52 (Previously Presented): An optical lens according to Claim 51, wherein said optical lens is an ophthalmic lens.

Claim 53 (Canceled).

Claim 54 (Previously Presented): The composition according to Claim 34, wherein m and n are each independently an integer selected from the group consisting of 1, 2, 3, 4, 5 and 6.

Claim 55 (Previously Presented): The composition according to Claim 34, wherein each of m and n are each independently selected from the group consisting of 2, 3, 4, 5 and 6.

Claim 56 (Previously Presented): The composition according to Claim 34, wherein m and n are each independently selected from the group consisting of 3, 4, 5 and 6.

Claim 57 (Previously Presented): The composition according to Claim 34, wherein m and n are each independently selected from the group consisting of 4, 5 and 6.

Claim 58 (Previously Presented): The composition according to Claim 34, wherein R^2 is independently a divalent aromatic or heteroaromatic group derived from at least one selected from the group consisting of benzene, naphthalene, biphenyl, diphenyl ether, diphenylmethane, diphenyldimethylmethane, bisphenone, diphenyl sulphone, quinoline, pyridine, anthracene and phenanthrene.

Claim 59 (Canceled).

Claim 60 (Previously Presented): The composition according to Claim 34, wherein R^9 , R^{10} and R^{11} are each independently a divalent aromatic or heteroaromatic group derived from at least one selected from the group consisting of benzene, naphthalene, biphenyl, diphenyl ether, diphenylmethane, diphenyldimethylmethane, bisphenone, diphenyl sulphone, quinoline, pyridine, anthracene and phenanthrene.

BASIS FOR THE AMENDMENT

Claims 34-52, 54-58 and 60 are active in the present application. Claims 1-33, 53 and 59 are canceled claims. Independent Claim 34 has been amended to include the limitations of previously presented dependent Claims 53 and 59. No new matter is added.